MULTIMEDIA UNIVERSITY STUDENT IDENTIFICATION NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2018/2019

BBF 2154 – INVESTMENT

(All sections / Groups)

26 OCTOBER 2018
9:00 a.m – 11:00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of 4 pages with 4 Questions only.
2. Answer **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Students are allowed to use non-programmable scientific and financial calculators.
4. Please write all your answers in the Answer Booklet provided.

QUESTION 1

a) Key indicator series is one of the technical analysis tools to predict future market movement. Technical indicator series can be used to trace bearish and bullish trends. At the same time, investors may spot unsuccessful market behavior and choose the opposite position.
Examine **FOUR** ways under the "contrary opinion rules".

(16 marks)

b) Explain the purpose of having a syndicate in investment banking.

(3 marks)

c) Ratna is very confident on the vast growth in technology industry, therefore she buys 150 shares of ThunderTech Inc. at RM33 per share. At the same time, she sells short for 250 shares of Render Corp at RM52 per share. Each transaction requires a 25% margin. Calculate the amount of borrowing and margin for each account.

(6 marks)

(Total: 25 marks)

QUESTION 2

(a) The selling stock price for Maju Berhad is RM58.50 with options available at RM50.00, RM60.00, and RM70.00 exercise prices. The RM60.00 call option price is RM3.75.

(i) Calculate the intrinsic value of the RM60.00 call.

(2 marks)

(ii) Is the RM60.00 call in the money? Explain.

(2 marks)

(iii) Calculate the speculative premium on the RM60.00 call option.

(3 marks)

(iv) Calculate the percentage of speculative premium over the stock price.

(2 marks)

(v) Are the RM50.00 and RM70.00 call options in the money? Explain.

(4 marks)

Continued ...

(b) Bond is a fixed income security in which an investor loans money to an entity (typically corporate or government) for a defined period of time at a variable or fixed interest rate. Jong Suk has invested in a bond that provides 10% coupon interest and its par value is RM1000. Currently, the bond is priced at RM1300 with 12 years to maturity.

(i) Calculate the yield to maturity (YTM) of this bond, using quarterly compounding.
(3 marks)

(ii) Calculate the yield to call (YTC) of this bond, using quarterly compounding, if the call of the bond can be made in 6 years at a price of RM1130.
(3 marks)

(iii) Examine the connection between bond price and interest rate by giving one example.
(6 marks)

(Total: 25 marks)

QUESTION 3

(a) An investment portfolio refers to a variety of asset classes and types of investments formed to achieve an appropriate risk-return portfolio allocation. Generally, stocks and bonds are used to construct a diversified portfolio. Below is a portfolio consisting of the following stocks:

Stock	Investment Amount	Beta	Expected return
Longan	RM40,000	1.80	18%
Mango	RM32,000	1.60	16%
Nutmeg	RM60,000	1.20	12%
Orange	RM43,000	0.80	8%

The Treasury bill rate is 5% and the expected return on the market portfolio is 8%.

(i) Calculate the expected return of the portfolio.
(5 marks)

(ii) Calculate the beta of the portfolio.
(5 marks)

(iii) Calculate the required rate of return.
(2 marks)

Continued ...

(b) The capital market line (CML) from the capital asset pricing model is used to portray the rates of return for efficient portfolios subject to the risk level for a market portfolio. You have collected some figures that are related to CML as follows:

- risk-free rate (R_F) = 8%,
- market rate of return (K_M) = 12%,
- market standard deviation (σ_M) = 10%
- standard deviation of the portfolio (σ_P) = 12%.

(i) Using the formula for the capital market line, calculate the expected value of portfolio (K_P).

(5 marks)

(ii) Assume the portfolio standard deviation (σ_P) has increased to 16%. Using the formula for the capital market line, calculate the expected value of portfolio (K_P).

(5 marks)

(iii) Compare the answer in part (i) and part (ii). In terms of capital market theory, explain whether the expected value of portfolio (K_P) is increased.

(3 marks)

(Total: 25 marks)

QUESTION 4

(a) Happy Go Lucky Corporation anticipates a non-constant growth pattern for dividends. Dividends at the end of year 1 are RM2.00 per share and are expected to grow by 16% per year until the end of year 5. After year 5, dividends are expected to grow at 6% as far as the company can see into the future. All dividends are to be discounted back to present at a discount rate of 10%.

(i) Compute the dividend for year 2 until year 5.

(4 marks)

(ii) Solve the Net Present Value (NPV) for all dividends from year 1 until year 5.

(3 marks)

(iii) Calculate the dividend in year 6.

(2 marks)

(iv) Calculate the present value of stock price in year 5.

(2 marks)

(v) Compute the total present value of stock.

(2 marks)

Continued ...

(b) Kellogg Company expects that they need to buy 70,000 bushels of corns in six months to use in their products. The existing cash price for corns is RM6.50 a bushel. A six-month futures contract for corns can be bought at RM6.60.

(i) Discuss why the company might need to buy futures contracts to hedge their position.
(2 marks)

(ii) To fully hedge their exposure, how many contracts will they need to buy? Assumed corns trade in 5,000-bushel contracts.
(2 marks)

(iii) If the cash price of corns ends up at RM6.75 per bushel after six months, how much will the actual cost of 70,000 bushels of corns have increased?
(3 marks)

(iv) After the futures contracts are closed out at RM6.75, what will be the gain or loss on the futures contracts?
(3 marks)

(v) What is the overall gain or loss after considering the answer in part (iii) and part (iv)?
(2 marks)

(Total: 25 marks)

End of Page